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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,921

Applicant(s)

NISHIKAWA, SEIICHI

Examiner

RAFFERTY KELLY

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-67 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 20050112
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Response filed on 9/5/08 has been acknowledged. In response to applicant's arguments traversing the restriction requirement, the restriction requirement has been withdrawn. As a result, all claims (claims 1 – 67) will now be examined.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on 5 different foreign applications. It is noted, however, that applicant has not filed a certified copy of any of the applications as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 35, 37-57, and 59-65 are rejected under 35 U.S.C. 102(b) as being anticipated by Fidalgo (US 5598032).

Regarding claim 35, Fidalgo teaches an IC module comprising: a substrate (20); an IC chip (8) mounted on the substrate; and a contact terminal plate having a plurality of contact terminals and mounted on the substrate (10 and 11); wherein the plurality of contact terminals of the contact-terminal plate include extra contact terminals (11) connected to antenna terminals of the IC chip (Fig. 8)

Regarding claim 37, Fidalgo teaches the IC module according to claim 35, as shown above. Fidalgo further teaches wherein the extra contact terminals are a terminal CE1 (11) disposed between terminals C1 and C5 (10) among eight contact terminals C1 to C8 and a terminal CE2 (11) disposed between the terminals C4 and C8 (10) (names of terminals are arbitrary).

Regarding claim 38, Fidalgo teaches the IC module according to claim 37, as shown above. Fidalgo further teaches wherein the antenna terminals of the IC chip are connected to the terminals CE1 and CE2 by wire (9) bonding (Fig. 8).

Regarding claim 39, Fidalgo teaches the IC module according to claim 37, as shown above. Fidalgo further teaches wherein the antenna terminals of the IC chip are connected to the terminals CE1 and CE2 via through holes (22) (Fig. 8).

Regarding claim 40, Fidalgo teaches the IC module according to claim 37, as shown above. Fidalgo further teaches wherein the terminals CE1 and CE2 are those to be connected to an antenna coil (5) formed in a SIM holder or in an IC card holder (Fig. 1).

Regarding claim 41, Fidalgo teaches the IC module according to claim 37, as shown above. Fidalgo further teaches wherein a pair of U-shaped circuits (antenna 5 could be considered as a plurality of U-shaped circuits) are formed so as to surround the IC chip on a surface of the substrate opposite a surface of the substrate on which the contact-terminal plate is mounted (Fig. 1 and Fig. 2), the terminals CE1 and CE2 are connected to the U-shaped circuits (Fig. 8), respectively, and the U-shaped circuits are connected to the antenna terminals of the IC chip, respectively (Fig. 8).

Regarding claim 42, Fidalgo teaches the IC module according to claim 38, as shown above. Fidalgo further teaches wherein the U-shaped circuits are connected to the antenna terminals of the IC chip, respectively (Fig. 8).

Regarding claim 43, Fidalgo teaches the IC module according to claim 41, as shown above. Fidalgo further teaches wherein the terminals CE1 and CE2 (11) are connected to the antenna terminals of the IC chip respectively (Fig. 8).

Regarding claim 44, Fidalgo teaches an IC module comprising: a substrate (20); an IC chip mounted on the substrate (8); and a contact terminal plate provided with a plurality of contact terminals and mounted on the substrate (10 and 11); wherein a pair of U-shaped circuits (antenna 5 could be considered as a plurality of U-shaped circuits) are formed so as to surround the IC chip on a surface of the substrate opposite a surface of the substrate on which the contact terminal plate is mounted (Fig. 1 and Fig. 2), and the U-shaped circuits are connected to antenna terminals of the IC chip, respectively (Fig. 8).

Regarding claim 45, Fidalgo teaches the IC module according to claim 44, as shown above. Fidalgo further teaches the U-shaped circuits are connected to an antenna coil formed in a card (U-shaped circuit is the antenna and thus is connected to an antenna) (Fig. 2).

Regarding claim 46, Fidalgo teaches the IC module according to claim 44, as shown above. Fidalgo further teaches wherein the U-shaped circuits are connected to the contact terminals, not used for contact communication, among the plurality of contact terminals (Fig. 8).

Regarding claim 47, Fidalgo teaches the IC module according to claim 46, as shown above. Fidalgo further teaches wherein the U-shaped circuits are connected to terminals C4 and C8 among eight contact terminals C1 to C8 (names of terminals are arbitrary) (Fig. 8).

Regarding claim 48, Fidalgo teaches the IC module according to claim 47, as shown above. Fidalgo further teaches wherein the U-shaped circuits are connected to the terminals C4 and C8 via through holes (23) (Fig. 8).

Regarding claim 49, Fidalgo teaches the IC module according to claim 44, as shown above. Fidalgo further teaches wherein the U-shaped circuits are connected to antenna terminals of the IC chip by wire bonding (9) (Fig. 8).

Regarding claim 50, Fidalgo teaches the IC module according to claim 44, as shown above. Fidalgo further teaches wherein the U-shaped circuits are connected to extra contact terminals included in the plurality of contact terminals (11).

Regarding claim 51, Fidalgo teaches the IC module according to claim 51, as shown above. Fidalgo further teaches wherein the U-shaped circuits are connected to the extra contact terminals via through holes, respectively (23) (Fig. 8).

Regarding claim 52, Fidalgo teaches the IC module according to claim 50, as shown above. Fidalgo further teaches wherein the U-shaped circuits are connected to antenna terminals of the IC chip by wire bonding (9) (Fig. 8).

Regarding claim 53, Fidalgo teaches the IC module according to claim 50, as shown above. Fidalgo further teaches wherein the extra contact terminals are connected to an antenna coil formed on a SIM holder or and IC card holder (Fig. 1).

Regarding claim 54, Fidalgo teaches an IC module comprising: a substrate (20); an IC chip mounted on the substrate (8), and provided with contact and noncontact interfaces (Col. 3 Lines 14-16); and a contact-terminal plate provided with a plurality of contact terminals and mounted on the substrate (10 and 11); wherein an antenna-terminal plate to be connected to an antenna formed on a card is mounted on a surface of the substrate opposite a surface of the substrate on which the contact-terminal plate is mounted (Fig. 1 and Fig. 2), the antenna-terminal plate is connected to the contact terminals (Fig. 8), not used for contact communication, among the plurality of contact terminals by wires, and the antenna terminals of the IC are connected to the contact terminals not used for contact communication or to the antenna-terminal plate by wires (Fig. 8).

Regarding claim 55, Fidalgo teaches the IC module according to claim 54, as shown above. Fidalgo further teaches wherein contact terminals C4 and C8 among the eight terminals C1 to C8 are those not used for contact communication (11 are connected to antenna 5).

Regarding claim 56, Fidalgo teaches an IC card comprising: a substrate (20); and IC chip mounted on the substrate (8); a contact-terminal plate provided with a plurality of contact terminals and mounted on the substrate (10 and 11 - Fig. 8); and a card holding the substrate, the IC chip and the contact terminal plate (Fig. 1); wherein the card is provided with an antenna coil (5), and an antenna terminal plate (Fig. 2) to be connected to the antenna coil is attached to a surface of the substrate opposite a surface on which the contact terminal plate is mounted (Fig. 1).

Regarding claim 57, Fidalgo teaches an IC card comprising: a substrate (20); an IC chip mounted on the substrate (8); a contact-terminal plate provided with a plurality of contact terminals and mounted on the substrate (10 and 11); and a card holding the substrate, the IC chip and the contact-terminal plate (Fig. 1); wherein the card is provided with an antenna coil (5), and an antenna-terminal plate to be connected to the antenna coil (Fig. 2) is attached to a surface of the substrate opposite a surface on which the contact-terminal plate is mounted (Fig. 1).

Regarding claim 59, Fidalgo teaches the IC card according to claim 57, as shown above. Fidalgo further teaches wherein the extra contact terminals are a terminal CE1 disposed between terminals C1 and C5 among eight contact terminals C1 to C8, and a terminal CE2 disposed between the terminals C4 and C8 (names of terminals are arbitrary) (Fig. 8).

Regarding claim 60, Fidalgo teaches the IC card according to claim 59, as shown above. Fidalgo further teaches wherein the antenna terminals of the IC chip are connected to the terminals CE1 and CE2 by wire bonding (9) (Fig. 8).

Regarding claim 61, Fidalgo teaches the IC card according to claim 59, as shown above. Fidalgo further teaches wherein the antenna terminals of the IC chip are connected to the terminals CE1 and CE2 via through holes (22) (Fig. 8).

Regarding claim 62, Fidalgo teaches the IC card according to claim 59, as shown above. Fidalgo further teaches wherein the terminals CE1 and CE2 are connected to an antenna coil (5) formed in an IC card holder (Fig. 1).

Regarding claim 63, Fidalgo teaches the IC card according to claim 59, as shown above. Fidalgo further teaches wherein a pair of U-shaped circuits (antenna 5 could be considered as a plurality of U-shaped circuits) are formed so as to surround the IC chip (Fig. 2) on a surface of the substrate opposite a surface of the substrate on which the contact terminal plate is mounted (Fig. 1), the terminals CE1 and CE2 are connected to the U-shaped circuits, respectively (Fig. 8).

Regarding claim 64, Fidalgo teaches the IC card according to claim 63, as shown above. Fidalgo further teaches wherein the U-shaped circuits are connected to the antenna terminals of the IC chip, respectively (Fig. 8).

Regarding claim 65, Fidalgo teaches an IC card holder for detachably holding an IC card, said IC card holder comprising: a case (fig. 1); a terminal plate contained in the case and capable of being electrically connected to a contact terminal plate included in the IC card (Fig. 2); and an antenna coil formed in the case (5); wherein terminals of the terminal plate connected to the antenna coil (15) are connected to extra contact terminals formed on the IC card (Fig. 8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 66 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fidalgo (US 5598032) in view of Leydier et al. (US 6694399 B1). The teachings of Fidalgo have been discussed above.

Regarding claim 66, Fidalgo teaches the IC card holder according to claim 65, as shown above. Fidalgo further teaches wherein the IC card holder is for holding a three-way IC card (this feature is an intended use and imparts no structural features), and terminals CEH1, CEH2 (15) of the terminal plate corresponding to terminals CE1 and CE2 of the three-way IC card are connected to the antenna coil (5) (Fig. 2).

Regarding claim 67, Fidalgo teaches the IC card holder according to claim 66, as shown above. Fidalgo further teaches wherein the IC card has an IC chip provided with contact, noncontact and USB contact interfaces, and an antenna coil (5) connected to the IC chip.

Fidalgo does not explicitly teach the USB contact interface, however, the contact interface of Fidalgo could be used as a USB contact interface.

Leydier teaches a USB connector placed on an IC card holder (Fig. 4), and shows that a standard smart card contact interface (on card 200) can be used as a USB contact interface.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a USB interface with the smart card because it allows for greater flexibility for the users of the card.

3. Claims 1-7 and 9-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fidalgo (US 5598032) in view of Jigour et al. (US 5815426).

Regarding claim 1, Fidalgo teaches an IC module comprising: a substrate (20); an IC chip (8) mounted on the substrate and provided with a dual interface for contact and noncontact communication (Col. 3 Lines 14-16); a contact terminal plate mounted on the substrate and provided with a plurality of contact terminals (10 and 11); and a base holding the substrate, the IC chip, and the contact terminal plate (Fig. 1); wherein antenna terminals of the IC chip are connected to the contact terminals (11) that are not used for contact communication (Fig. 8).

Fidalgo lacks explicitly teaching that the IC device is a SIM.

However, the fact that an IC device can be a SIM device is very well known in the art. Jigour, for example, teaches a SIM card as described in the claim (Fig. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the structure of Fidalgo as a standard SIM card because SIM cards are small enough that they can be used in, for example, mobile devices to store essential device data.

Regarding claim 2, Fidalgo in view of Jigour teaches the SIM according to claim 1, as shown above. Fidalgo further teaches wherein an antenna coil is formed on the base (Fig. 2).

Regarding claim 3, Fidalgo in view of Jigour teaches the SIM according to claim 1, as shown above. Fidalgo further teaches wherein the antenna terminals of the IC chip are connected to terminals C4 and C8 (11) included in eight contact terminals of the SIM (Fig. 8).

Regarding claim 4, Fidalgo in view of Jigour teaches the SIM according to claim 1, as shown above.

Fidalgo lacks explicitly teaching the size of the device.

Jigour teaches wherein the SIM has the shape of a thin plate having a thickness of 1.0 mm or below and a substantially rectangular shape not greater than 24 mm x 15 mm in a projection on a horizontal plane (Col. 7 Line 66 – Col. 8 Line 1).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use these dimensions because they are a standard SIM size and it would allow the SIM to be used in most devices.

Regarding claim 5, Fidalgo in view of Jigour teaches the SIM according to claim 1, as shown above.

Fidalgo lacks teaching the graphics on the card.

Jigour teaches wherein one or some of a half-length photograph, a name and a number are printed on a surface of the SIM base opposite a surface of the SIM base on which the contact terminal plate is mounted (Col. 7 Lines 22-29).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to print graphics on the card because it allows for more customization or for advertising by the card supplier.

Regarding claim 6, Fidalgo teaches a device comprising: a substrate (20); an IC chip mounted on the substrate (8); a contact terminal plate provided with a plurality of contact terminals (10 and 11); and a base holding the substrate, the IC chip and the contact terminal plate (Fig. 1); wherein the contact terminals of the contact terminal

plate include extra contact terminals (11) to be connected to antenna terminals formed on the IC chip (Fig. 8).

Fidalgo lacks explicitly teaching that the IC device is a SIM.

However, the fact that an IC device can be a SIM device is very well known in the art. Jigour, for example, teaches a SIM card as described in the claim (Fig. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the structure of Fidalgo as a standard SIM card because SIM cards are small enough that they can be used in, for example, mobile devices to store essential device data.

Regarding claim 7, Fidalgo teaches a device comprising a substrate (20); an IC chip mounted on the substrate (8); a contact terminal plate provided with a plurality of contact terminals (10 and 11); and a base holding the substrate, the IC chip and the contact terminal plate; wherein the base is provided with an antenna coil (5), and an antenna terminal plate to be connected to the antenna coil is formed on a surface of the substrate opposite a surface on which the contact terminal plate is mounted (Fig. 1).

Fidalgo lacks explicitly teaching that the IC device is a SIM.

However, the fact that an IC device can be a SIM device is very well known in the art. Jigour, for example, teaches a SIM card as described in the claim (Fig. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the structure of Fidalgo as a standard SIM card because SIM cards are small enough that they can be used in, for example, mobile devices to store essential device data.

Regarding claim 9, Fidalgo in view of Jigour teaches the SIM according to claim 6, as shown above. Fidalgo further teaches wherein the extra contact terminals are a terminal CE1 (11) disposed between terminals C1 and C5 (10) among eight contact terminals C1 to C8 (10 and 11), and a terminal CE2 (11) disposed between the terminals C4 and C8 (10) (names of terminals are arbitrarily assigned).

Regarding claims 10 and 11, Fidalgo in view of Jigour teaches the SIM according to claim 9, as shown above. Fidalgo further teaches wherein the antenna terminals of the IC chip are connected terminals CE1 and CE2 (11) by wire bonding and via through holes (Fig. 8).

Regarding claim 12, Fidalgo in view of Jigour teaches the SIM according to claim 9, as shown above. Fidalgo further teaches wherein the terminals CE1 and CE2 are those to be connected to an antenna coil formed in a SIM holder (Fig. 1, 2, and 8).

Regarding claim 13, Fidalgo in view of Jigour teaches the SIM according to claim 9, as shown above. Fidalgo further teaches wherein a pair of U-shaped circuits (antenna 5 could be considered as a plurality of U-shaped circuits) are formed so as to surround the IC chip (Fig. 1 and Fig. 2) on a surface of the substrate opposite a surface of the substrate on which the contact terminal plate is mounted, the terminals CE1 and CE2 are connected to the U-shaped circuits, respectively (Fig. 8).

Regarding claim 14, Fidalgo in view of Jigour teaches the SIM according to claim 13, as shown above. Fidalgo further teaches wherein the U-shaped circuits are connected to the antenna terminals of the IC chip (Fig. 8).

Regarding claim 15, Fidalgo in view of Jigour teaches the SIM according to claim 13, as shown above. Fidalgo further teaches wherein the terminals CE1 and CE2 are connected to the antenna terminals of the IC chip (Fig. 8).

Regarding claim 16, Fidalgo in view of Jigour teaches the SIM according to claim 6 or 7, as shown above.

Fidalgo lacks explicitly teaching the size of the device.

Jigour teaches wherein the SIM has the shape of a thin plate having a thickness of 1.0 mm or below and a substantially rectangular shape not greater than 24 mm x 15 mm in a projection on a horizontal plane (Col. 7 Line 66 – Col. 8 Line 1).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use these dimensions because they are a standard SIM size and it would allow the SIM to be used in most devices.

Regarding claim 17, Fidalgo in view of Jigour teaches the SIM according to claim 6 or 7, as shown above.

Fidalgo lacks teaching the graphics on the card.

Jigour teaches wherein one or some of a half-length photograph, a name and a number are printed on a surface of the SIM base opposite a surface of the SIM base on which the contact terminal plate is mounted (Col. 7 Lines 22-29).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to print graphics on the card because it allows for more customization or for advertising by the card supplier.

4. Claims 18-20, 22-26, 28-32, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fidalgo in view of Jigour and in further view of Leydier et al.

Regarding claim 18, Fidalgo teaches a holder for holding an IC device (Fig. 1), said holder comprising: a case (Fig. 1); a terminal plate (3) contained in the case and capable of being electrically connected to a contact-terminal plate (10 and 11) included in the device (Fig. 1); and an antenna coil (5) formed in the case (Fig. 2); wherein terminals (15) to be connected to the antenna coil among those formed on the terminal plate are those to be connected to contact terminals (11), not used for contact communication, of the device (Fig. 2 and Fig. 8).

Fidalgo lacks explicitly teaching that the IC device is a SIM.

However, the fact that an IC device can be a SIM device is very well known in the art. Jigour, for example, teaches a SIM card as described in the claim (Fig. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the structure of Fidalgo as a standard SIM card because SIM cards are small enough that they can be used in, for example, mobile devices to store essential device data.

Fidalgo also lacks the holder detachably holding the card.

Leydier teaches a SIM holder for detachable holding a card (Fig. 4).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use a holder that is detachable from the card because then the card can be used individually when the features of the holder are not required. For example, as

shown in Leydier, if a USB connection to the card is not required, then the bulky holder does not need to be attached to the card.

Regarding claim 19, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 18, as shown above. Fidalgo further teaches wherein the antenna coil is formed on an inner surface (Fig. 1) of the case along the peripheral edges (Fig. 2) of the card held in the case (Fig. 1).

Regarding claim 20, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 19, as shown above. Fidalgo further teaches wherein the antenna coil is formed in the case around the terminal plate (Fig. 2) along the peripheral edges of the SIM held in the case (Fig. 1).

Regarding claim 22, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 18, as shown above.

Fidalgo lacks explicitly teaching the size of the device.

Jigour teaches wherein the SIM has the shape of a thin plate having a thickness of 1.0 mm or below and a substantially rectangular shape not greater than 24 mm x 15 mm in a projection on a horizontal plane (Col. 7 Line 66 – Col. 8 Line 1).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use these dimensions because they are a standard SIM size and it would allow the SIM to be used in most devices.

Regarding claim 23, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 18, as shown above. Fidalgo further teaches wherein the SIM held in

the case is connected to the antenna coil (5) for noncontact communication with an external device (abstract).

Fidalgo lacks the USB features.

Leydier et al. teaches a converter placed in the case and capable of converting an ISO 7816 interface (Fig. 1) into a USB interface (Fig. 4); and a USB connector placed on the case (41 and 42) (Col. 7 Line 64 to Col. 8 Line 45).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a USB interface with the smart card because it allows for greater flexibility for the users of the card.

Regarding claim 24, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 23, as shown above. Fidalgo further teaches wherein the SIM held in the case includes an IC chip provided with a dual interface for contact and noncontact communication (Col. 3 Lines 14-16), and a SIM antenna coil (5) connected to the IC chip (Fig. 1).

Regarding claim 25, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 23, as shown above. Fidalgo further teaches wherein the antenna coil is formed on an inner surface of the case (Fig. 1) so as to extend along the peripheral edges of the SIM held in the case (Fig. 2).

Regarding claim 26, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 26, as shown above. Fidalgo further teaches wherein the antenna coil is formed in the case around the terminal plate along the peripheral edges of the SIM held in the case (Fig. 1 and Fig. 2).

Regarding claim 28, Fidalgo teaches a card holder for holding a card, said card holder comprising: a case (Fig. 1); a terminal plate contained in the case and capable of being electrically connected to a contact-terminal plate included in the card (Fig. 2); and an antenna coil formed in the case (5); wherein terminals of the terminal plate (15) connected to the antenna coil, are connected to extra contact terminals on the card (Fig. 8).

Fidalgo lacks explicitly teaching that the IC device is a SIM.

However, the fact that an IC device can be a SIM device is very well known in the art. Jigour, for example, teaches a SIM card as described in the claim (Fig. 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the structure of Fidalgo as a standard SIM card because SIM cards are small enough that they can be used in, for example, mobile devices to store essential device data.

Fidalgo also lacks the holder detachably holding the card.

Leydier teaches a SIM holder for detachable holding a card (Fig. 4).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use a holder that is detachable from the card because then the card can be used individually when the features of the holder are not required. For example, as shown in Leydier, if a USB connection to the card is not required, then the bulky holder does not need to be attached to the card.

Regarding claim 29, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 28, as shown above. Fidalgo further teaches terminals CEH1, CEH2

(15) of the terminal plate corresponding to terminals CE1 and CE2 of the SIM are connected to the antenna coil (5) (Fig. 2).

Fidalgo lacks the USB connector placed on the case.

Leydier teaches a USB connector placed on the case (Fig. 4).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a USB interface with the smart card because it allows for greater flexibility for the users of the card.

Regarding claim 30, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 29, as shown above. Fidalgo further teaches wherein the SIM held in the case is provided with contact, noncontact and USB contact interfaces, and an antenna coil (5) connected to the IC chip.

Fidalgo does not explicitly teach the USB contact interface, however, the contact interface of Fidalgo could be used as a USB contact interface.

Leydier teaches a USB connector placed on an IC card holder (Fig. 4), and shows that a standard smart card contact interface (on card 200) can be used as a USB contact interface.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a USB interface with the smart card because it allows for greater flexibility for the users of the card.

Regarding claim 31, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 28, as shown above. Fidalgo further teaches wherein the antenna

coil (5) is formed on an inner surface of the case along the peripheral edges of the SIM held in the case (Fig. 1 and Fig. 2).

Regarding claim 32, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 28, as shown above. Fidalgo further teaches wherein the antenna coil is formed in the case around the terminal plate (Fig. 2) substantially along the peripheral edges of the SIM held in the case (Fig. 1).

Regarding claim 34, Fidalgo in view of Jigour and Leydier teaches the SIM holder according to claim 28, as shown above. Fidalgo further teaches wherein terminals CEH1 and CEH2 (15) on the terminal plate corresponding to terminals CE1 and CE2 of the SIM are connected to the antenna coils (Fig. 2).

5. Claims 36 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fidalgo in view of Leydier et al. and in further view of Amadeo (US 6628240 B2).

Regarding these claims, Fidalgo teaches the IC cards according to claims 35, 56, or 57. Fidalgo further teaches a contact interface conforming to ISO 7816 (Col. 3 Line 48), a noncontact interface, and a USB contact interface.

Fidalgo does not explicitly teach the USB contact interface, however, the contact interface of Fidalgo could be used as a USB contact interface.

Leydier teaches a USB connector placed on an IC card holder (Fig. 4), and shows that a standard smart card contact interface (on card 200) can be used as a USB contact interface.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a USB interface with the smart card because it allows for greater flexibility for the users of the card.

Fidalgo also does not explicitly teach that the noncontact interface conforms to ISO 14443.

However, ISO 14443 is a very well known and widely used noncontact interface standard as can be seen in Amadeo (Col. 2 Line 30).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use the very common ISO 14443 as the standard for the noncontact interface because it means the card will be able to be used with a wide range of currently available noncontact readers.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fidalgo as modified by Jigour and in further view of Amadeo and Leydier. The teachings of Fidalgo as modified by Jigour have been discussed above.

Regarding claim 8, Fidalgo as modified by Jigour teaches the SIM according to claims 6 or 7. Fidalgo further teaches a contact interface conforming to ISO 7816 (Col. 3 Line 48), a noncontact interface, and a USB contact interface.

Fidalgo does not explicitly teach the USB contact interface, however, the contact interface of Fidalgo could be used as a USB contact interface.

Leydier teaches a USB connector placed on an IC card holder (Fig. 4), and shows that a standard smart card contact interface (on card 200) can be used as a USB contact interface.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a USB interface with the smart card because it allows for greater flexibility for the users of the card.

Fidalgo also does not explicitly teach tha the noncontact interface conforms to ISO 14443.

However, ISO 14443 is a very well known and widely used noncontact interface standard as can be seen in Amadeo (Col. 2 Line 30).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use the very common ISO 14443 as the standard for the noncontact interface because it means the card will be able to be used with a wide range of currently available noncontact readers.

7. Claims 21, 27, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fidalgo as modified by Jigour and Leydier, and in further view of Brewer et al. (US 654154 B1). The teachings of Fidalgo as modified by Jigour and Leydier have been discussed above.

Regarding claims 21, 27, and 33, Fidalgo as modified by Jigour and Leydier teach the devices of claims 18, 23, and 28, as shown above.

Jigour further lacks the case being transparent.

Brewer teaches wherein at least a part of the case is formed of a transparent resin, through which one or some of a half-length photograph, a name and a number printed on a surface of the SIM held in the case can be viewed (Claim 2 of Brewer).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a transparent holder because it allows a user to see the printing on the SIM card even when it is in the holder. This allows the card to be identifiable without needing to be removed from the holder.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAFFERTY KELLY whose telephone number is (571)270-5031. The examiner can normally be reached on Mon. - Fri. 800-1730 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Application/Control Number: 10/520,921

Page 24

Art Unit: 2876

Examiner, Art Unit 2876

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/Michael G Lee/

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